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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,103	10/04/2003	David J. Danitz	PAT-1337-CIPCON	2233

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EXAMINER	
NGUYEN, TUAN VAN	
ART UNIT	**PAPER NUMBER**
3731	

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/679,103	DANITZ ET AL.	
	Examiner	Art Unit	
	Tuan V. Nguyen	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *50-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *50-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

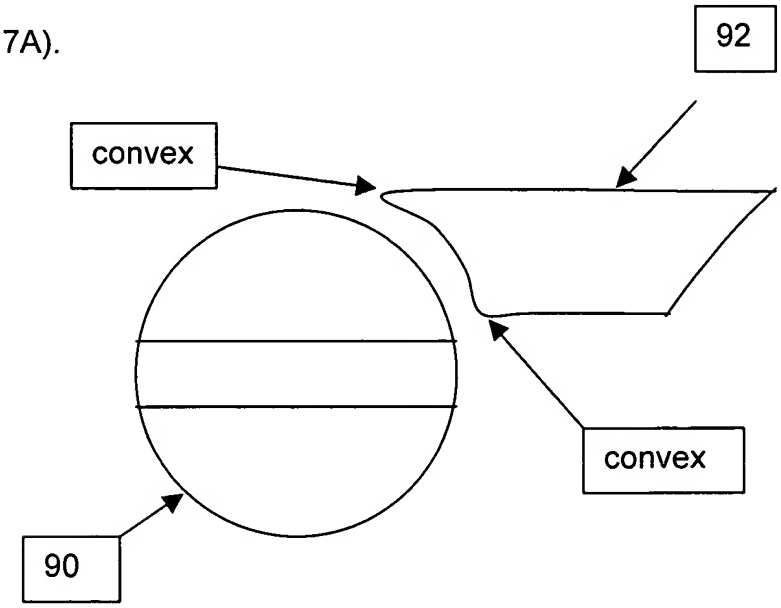
Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. With respect to arguments regarding "a concave surface on the links 92 in Fig. 7A of Spence contacts the surface of the links 90. In contrast, as best shown in Fig. 3A of the present application, a convex surface of the beads 36b contacts the surface of an adjacent bead 36a". Examiner respectfully traverses the applicant's remarks: Spence discloses in Fig. 7A the contact surface on bead 92 or second bead includes concave surface and two convex surfaces in each of the three dimensions, x, y, and z (see picture below shows a partial enlargement view of Fig. 7A).



Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 50-55 and 56-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Spence et al (U.S. 6,019,722).**

4. Referring to claims 50-52, and 56-57, Spence et al show a surgical device having a shaft assembly comprising a flexible shaft. The flexible shaft 64 defines a bore and comprises alternating first beads 90 and second beads 92 wherein the first and second beads having an outer surface. The second beads has a larger inner diameter than the first beads and each of second beads is supported on the outer surface of the first beads (see Fig. 7A). The second beads also have a larger outer diameter than each of the first beads wherein at contact locations the second bead 92 has at least on convex surface. Here it is noted that Spence et al do not show that a contact location, the contact surface on second bead is entirely or only have convex configuration in each of the three dimension. It would have been an obvious design choice to one of ordinary skill in the art to use design a bead having at contact locations has a convex configuration in each of three dimension since such a design does not solve any stated problem. As to the recitation that the shaft is for use with a clamp device, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention

from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

5. Referring to claims 53, 54, 58, and 59, Spence et al do not show the second beads has a smaller outer diameter than each of the first beads or has the same outer diameter as each of the first beads. It would have been an obvious design choice to one of ordinary skill in the art to design an outer diameter of the second beads smaller than the first beads or same with each of the first bead since such a design does not solve any stated problem.

6. Referring to claims 55 and 60, Spence et al disclose in cross-section view (see Fig. 7A) the second beads 90 contacts the outer surface of two adjacent first beads 92 along a line contact.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 60-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cosgrove, III et al (U.S. 6,139,563) and further in view of Spence et al (U.S. 6,019722).**

10. Referring to claims 60-64, Cosgrove III et al show a clamp comprising a handle assembly 12, a gripping assembly 16 having a pair of jaws 48 and a shaft assembly 14. The shaft assembly has a flexible shaft, wherein the shaft having a proximal end coupled to the handle assembly and a distal end coupled to the gripping assembly. The flexible shaft defines a bore and comprises a plurality of beads 38. A cable 31 extends through the bore and has a proximal end coupled to the handle assembly and a distal end coupled to the gripping assembly. Cosgrove, III et al do not show the beads comprising alternating first and second beads wherein the second beads have a larger inner diameter than the first beads and each of the second beads is supported on the outer surface of the first beads. Spence et al show a surgical device having a shaft assembly comprising flexible shaft. The flexible shaft 64 defines a bore and comprises alternating first beads 90 and second beads 92. The second beads have a larger inner diameter than the first beads and each of the second beads is supported on the outer surface of the first beads (see Fig. 7A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the bead formation of Cosgrove,

III et al with the bead formation taught by Spence et al, because this will provide a greater range of motion.

11. Referring to claims 65 and 66, Spence et al nor Cosgrove, III et al do not show the second beads has a smaller outer diameter than each of the first beads or has the same outer diameter as each of the first beads. It would have been an obvious design choice to one of ordinary skill in the art to design an outer diameter of the second beads smaller than the first beads or same with each of the first bead since such a design does not solve any stated problem.

12. Referring to claim 67, Spence et al disclose in cross-section view (see Fig. 7A) the second beads 90 contacts the outer surface of two adjacent first beads 92 along a line contact.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed.

Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 50-67 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,638,287 to Danitz et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-7 disclose the invention substantially as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Nguyen whose telephone number is 571-272-5962. The examiner can normally be reached on M-F: 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AnhTuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan V. Nguyen
May 1, 2006

ANHTUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
5/11/06